NASA Glenn Research Center
Cleveland, Ohio

February 24, 2005

TO: Glenn Employees, Onsite Contractors, NASA Exchange, and Resident Personnel

FROM: A/Director

SUBJECT: Meeting with Congressional Representatives from the Ohio Delegation

Last Wednesday, February 16, 2005, I was invited to Washington, DC, to talk with some members of the Ohio delegation to give them an overview of the NASA Glenn Research Center budget situation for FY06. I was joined by Center Deputy Director, Richard Christiansen, and others in attendance included about 30 congressional staffers representing most of the State of Ohio.

I reviewed the Agency and Center budgets and the Center's potential loss of up to 700 positions by the beginning of FY07. I explained that much of the decrease was a result of the significant downsizing of the Vehicle Systems Program in the Aeronautics Research Mission Directorate, but that was only part of the story. Significant transformational changes since FY04 in space-related research are expected to account for nearly 300 of the 700 potential positions. I talked about the FY05 earmarks to the budget and gave an example of how one $25M earmark negatively impacted Glenn's aeronautics programs. The charts that I used are attached for your information.

The meeting was an information sharing session that resulted in a positive dialogue. The delegation expressed great interest in the FY06 budget submit from the President, and they were concerned about the impact to Glenn. They also realized that there is a need to develop a national policy for aeronautics, and they expressed a willingness to advocate for one. Their next step is to look at the data and to formulate a plan. The delegation is clearly supportive of our Center.

I will provide you with updated information as it becomes available. Thank you for your interest and continued support of the NASA Glenn Research Center.

/s/

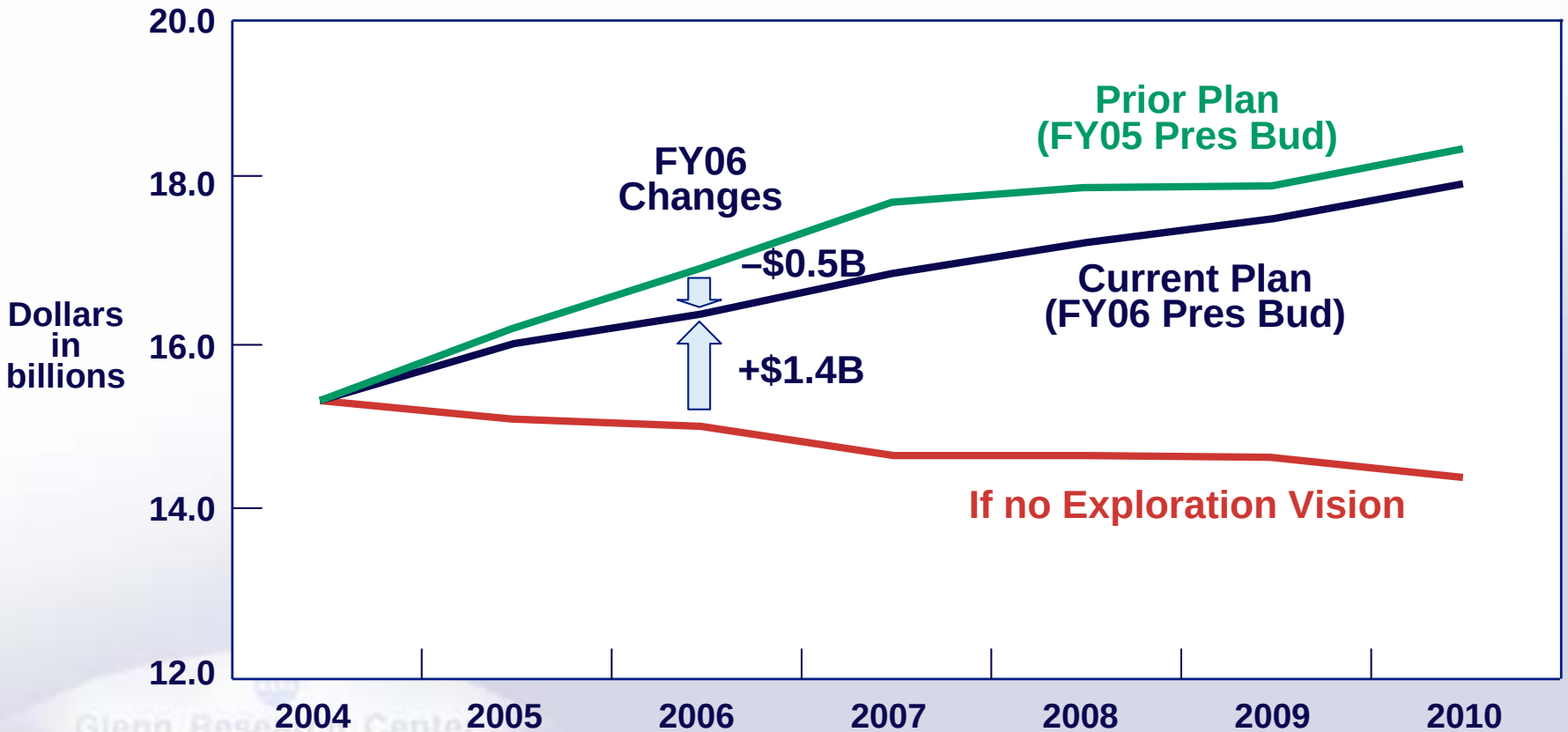
Julian M. Earls

FY06 NASA Budget Request

Opportunities and Challenges for the NASA Glenn Research Center

Julian M. Earls, Center Director
NASA Glenn Research Center
February 16, 2005

The Vision remains an Administration Priority in a Challenging Budget Environment



The Exploration Vision has enabled an increasing budget for NASA, although prior plans have been reduced in the government-wide effort to reduce deficit

Top-Level NASA FY06 Budget Changes from FY05

+$386M (2.4% increase)

Exploration Systems

FY05: $2,685M
FY06: $3,165M
Increase: $480M

18% Increase

Space Operations

FY05: $6.704M
FY06: $6,763M
Increase $59M

1% Increase

Science

FY05: $5,527M
FY06: $5,476M
Decrease $51M

1% Decrease

Aeronautics Research

FY05: $906M
FY06: $852M
Decrease $54M

6% Decrease

Aeronautics Transformation

Strategy for NASA Aeronautics

Aviation Safety and Security Program

Maintain

FY05: 185M
FY06: 193M

Airspace System Program

Grow

FY05: 152M
FY06: 200M

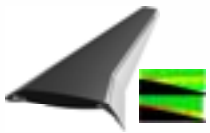
Vehicle Systems Program

Reduce & Transform

FY05: 569M
FY06: 459M

Vehicle Systems Program Transformation

TECHNOLOGY DEVELOPMENT



Integrated Tailored AeroStructures

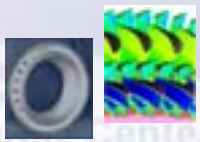
Quiet Aircraft Technology

Autonomous Robust Avionics

Low-Emission Alternative Power

Efficient Aerodynamics Shapes and Integration

Flight & Systems Demonstration



Ultra-Efficient Engine Technology

Major changes:

"reduces funding for program activities in which the government role is no longer justified" (e.g., subsonic transports)

"emphasizes higher risk NASA research programs where the private sector will not invest the necessary funds due to the risk of inadequate financial returns." (Barrier-breaking)

"reduce the number of civil servants, contractors, and facilities affiliated with the program."

"emphasize more extensive use of peer review." (re: competition)

Excerpts from OMB public release - "Major Saving and Reforms in the President's FY 2006 Budget."

TECHNOLOGY & FLIGHT DEMONSTRATION

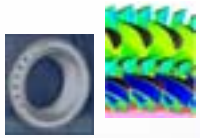
Subsonic Noise Reduction

Sonic Boom Suppression

Zero - Emissions Aircraft

High-Altitude Long-Endurance Remotely Operated Aircraft

Vehicle Systems Program Transformation
Impact on Glenn

FY05 Projects			***Proposed Demonstration Projects***
 Quiet Aircraft Technology	**Terminated**	**Expect major role**	 **Subsonic Noise Reduction**
 Ultra-Efficient Engine Technology	**Terminated**	**Expect follow-on role**	 **Sonic Boom Suppression**
		Expect major role	 **Zero - Emissions Aircraft**
 Low-Emission Alternative Power	**Terminated**	**Expect major role**	 **High-Altitude Long-Endurance Remotely Operated Aircraft**

~$40-50M Loss

~420 fewer FTE required

Much Less Research, Less In-House Workforce and Facilities Needed, More Competitive Acquisitions, No Subsonic Turbine Engine Investment for Emissions Reduction

Significant Transformational Changes to GRC Since FY04

- Termination of Space Launch Initiative (SLI)
- Termination and transformation of many of the Mission and Science Measurement programs
- Refocusing of the Biological and Physical Research work
- Changing Scope and Schedule of Prometheus
- Agency funding in a transition account to accommodate FY06 workforce impacts due to SLI termination
- Transformation of Aeronautics Vehicle Systems Program
- Expectation that some level of direct funding of core competencies is no longer valid

- New Exploration Systems programs greatly mitigate these changes, but results to date lead to
  - 422 fewer FTE required for Aeronautics Research
  - 278 fewer FTE required for Space-related Research

To be competitive in FY07 and beyond, we must find ways to balance our capacity to meet demand

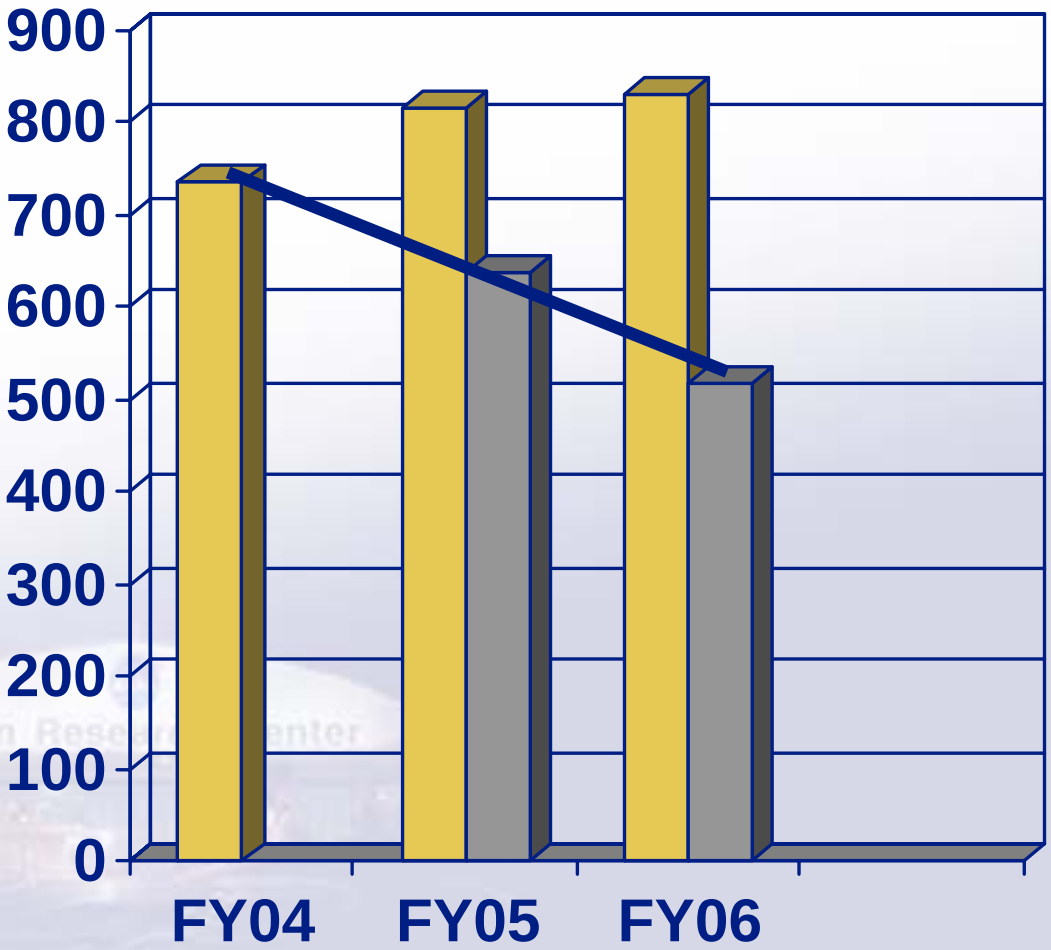
Note: FY05 Appropriation Impacts to Glenn

- Total impact for Glenn is $48M.
- Example of how impacts are addressed:
  - UEET: Ultra Efficient Engine Technology Program
    - $28M planned procurements for FY05
    - $25M directed to Intelligent Propulsion (Propulsion 21)
    - $3M remaining procurement reduces on-site contract workforce (~60WYE) to less than 1/4 effort and eliminates remaining contracts and grants
    - No further funds available to complete research objectives for UEET
- Recent actions taken by GRC to manage impacts:
  - All contracts/grants/agreements are prohibited from scope increases
  - All contracts/grants/agreements are under review for further action
  - UEET contracts/grants/agreements are being notified for cancellation and closeout costs requested

Total GRC Budget Runout

FY2004 Compared to the FY2006 Budget

Dollars in Millions



$217M reduction

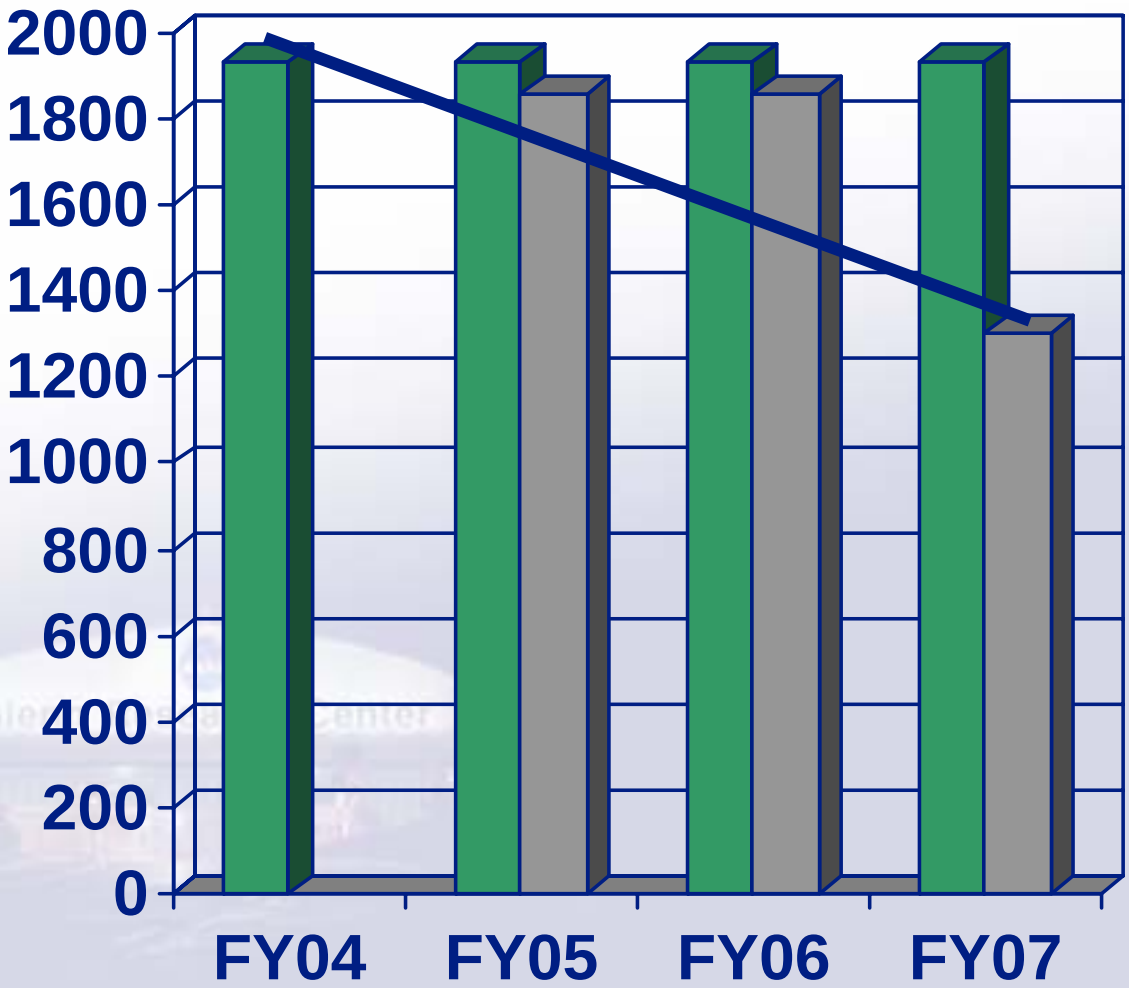
- **$98M in Exploration**
- **$71M in Vehicle Sys**
- **$48M in Other Programs**

FY04 Budget
FY06 Budget

Budget Workforce Levels

FY04 Compared to the FY06 Budget

Civil Service Full Time Equivalents (FTE's)



Major reductions in

Aero and Exploration

FY04 Budget

FY06 Budget

Reshaping Our Workforce

Transforming workforce is a significant issue

- Termination of previous programs, like Space Launch Initiative two years ago, significantly increased the workforce not supporting a specific program
- As previous work has been completed, and some projects discontinued, the issue has grown, placing an untenable burden on Center G&A

NASA must take necessary action to transform its workforce to ensure the successful implementation of the Vision

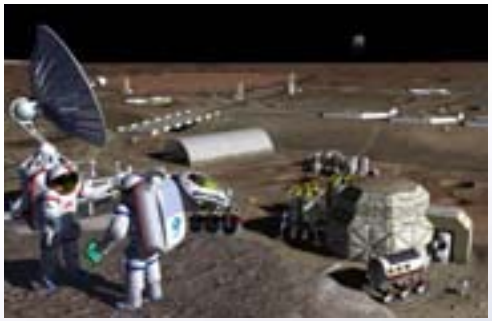
- Centers are restructuring themselves as necessary to ensure successful competition for new business opportunities
  - Aggressively evaluate and implement alternative management structures to enhance agility and enable new opportunities
- Centers are increasing G&A in FY05-06 to cover workforce funding to provide time for transition
  - Compete for new business opportunities
  - Pursue expanded buyouts, training, and job fairs
  - Seek voluntary reassignments, or directed reassignments if necessary
  - Make necessary contractor workforce adjustments
- Must complete these initiatives by 2007 to avoid undesirable consequences

GRC Core Competencies - Strong Foundation

In-Space Propulsion Systems

Nuclear Systems

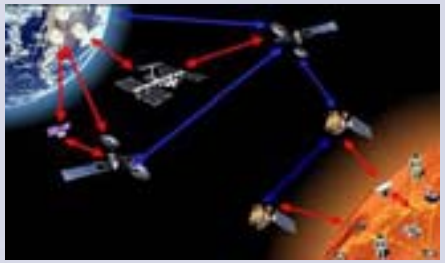
Power and Energy Conversion Systems



Aeropropulsion Systems

Fluids, Combustion and Reacting Systems Including Gravity Dependence

Aerospace Communications Architectures and Subsystems



Test and Evaluation for Atmospheric, Space and Gravitational Environments

Interdisciplinary Bioengineering for Human Systems

Actions to Increase Funding

- Compete and win strategy for all NASA competitions in which we have competency
- Form partnerships to increase roles in other NASA work
  - With other NASA Centers to support intramural tasks
  - With industry/academia to support extramural tasks
- Pursue strategic partnerships with Industry, Institutes and Academia to obtain work from outside of NASA
  - Seek or compete for reimbursable funding from other federal government agencies
  - Seek or compete for non-federally funded R&D and test support from industry or state and local governments
- Seek Enhanced Use Lease Authority to generate income from leasing assets to commercial/local government ventures

Early Actions To Address Capacity Issues

- Aeronautics competition ~ half of Vehicle Systems program expected to be competed in FY06
- Space Exploration competition
- Complete MOA with DOE on Fuel Cell Research
- Agency initiatives -reshaping workforce
  - Second Round of Buy-Outs
  - Job Fairs
  - Preparation for Involuntary Measures

If all retirement eligible employees take the voluntary actions by end of FY06, this situation is NOT alleviated

Summary

- We fully support the direction of the Agency towards achieving the exploration vision and it's transformation
- We are pursuing all avenues to find and compete for research opportunities in the near term --
  - however there are fewer opportunities in aeronautics research and development on a National level
  - and the opportunities in Exploration will be focused on system acquisitions, systems engineering and integration
- We are concerned with the policy (or lack thereof) for aeronautics research
- We are concerned that the Agency is moving away from a commitment of long-term research
- We can only be competitive for future Aeronautics and Space Exploration work beginning in FY07 if we are successful in every competition and every workforce reshaping action is available.